

AMENDMENTS TO THE CLAIMS:

1-3. (Canceled)

4. (Previously presented) A liquid crystal display device, comprising:
a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed; and
a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes, wherein said plurality of protrusions comprises a rod-shaped spacer extending between said first and second substrates.

5. (Currently amended) The device as claimed in claim 4, further comprising:
~~A liquid crystal display device, comprising:~~
~~a first substrate on which a plurality of pixel electrodes are formed;~~
~~a second substrate on which an opposing electrode is formed;~~
~~a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes;~~
~~and~~
at least one interposing layer formed between said plurality of protrusions and said second substrate.

6. (Canceled)

7. (Previously presented) A liquid crystal display device, comprising:
a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed; and
a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being

positioned at a substantially central portion of a corresponding one of said pixel electrodes,
wherein said protrusions comprise an isotropic material and a black material.

8. (Previously presented) A liquid crystal display device, comprising:
a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed;
a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes;
and
a light-shielding layer formed on said protrusions, to inhibit a leakage of light through said liquid crystal layer.

9-10. (Canceled)

11. (Previously presented) A liquid crystal display device, comprising:
a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed; and
a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,
wherein said opposing electrode comprises a plurality of stripe-shaped electrodes formed perpendicularly to said plurality of pixel electrodes, an intersection of a pixel electrode in said plurality of pixel electrodes and a stripe-shaped electrode in said plurality of stripe-shaped electrodes, defining a pixel of said liquid crystal display device.

12. (Previously presented) The device as claimed in claim 11, wherein an electric field formed in said liquid crystal layer between said pixel electrode and a corresponding one of said opposing electrodes is tilted toward a center of said pixel.

13. (Previously presented) The device as claimed in claim 12, wherein said electric field

causes molecules of said liquid crystal layer to be symmetrically oriented toward center of said pixel.

14. (Canceled)

15. (Currently amended) The device as claimed in claim 4,

~~A liquid crystal display device, comprising:
a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed; and
a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,
wherein said pixel electrodes comprise notches formed on peripheral portions of said pixel electrodes.~~

16. (Canceled)

17. (Previously presented) A liquid crystal display device, comprising:

a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed; and
a liquid crystal layer sandwiched between said first and second substrates, said second substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,
wherein said pixel electrodes comprise electrode-free portions extending radially outward from centers of said pixel electrodes.

18. (Currently amended) The device as claimed in claim 4,

~~A liquid crystal display device, comprising:
a first substrate on which a plurality of pixel electrodes are formed;
a second substrate on which an opposing electrode is formed; and
a liquid crystal layer sandwiched between said first and second substrates, said second~~

~~substrate further having thereon a plurality of protrusions, each of said protrusions being positioned at a substantially central portion of a corresponding one of said pixel electrodes,~~
wherein said pixel electrodes comprise concave portions extending radially outward from centers of said pixel electrodes.

19-20. (Canceled)